# Davidson County Mortality Report
# 1995

## An Analysis of Deaths, Death Rates and the Ten Leading Causes of Death Among Davidson County Residents


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# Davidson County Mortality Report 1995

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# 1995 Mortality Highlights for Davidson County

### Deaths by Gender, Race and Age

In 1995 there were 5,037 deaths of Davidson County residents. Half of these were male and half were female. Three fourths of those who died were white and one fourth were black or other race, roughly reflecting the racial distribution within the county (73% white, 27% black or other race). Most (68%) of these deaths were of persons age 65 and over. The average age at death for females was 75, males 63, whites 71 and blacks 63.

### Death Rates by Gender, Race and Age

The crude death rate (number of deaths per 100,000 population) was 958 overall; 1,008 for males and 914 females (a 10% difference); 982 for whites and 951 for blacks (a 3% difference). When stratified by age, gender and race, the black male has the highest death rate at each age grouping; white females have the lowest (see p. 4).

### Infant Mortality

There were 65 deaths among children under age one; 55% white and 45% black or other race, reflecting the historical disproportionate number of black infant deaths. The infant mortality rate (infant deaths per 1,000 live births) was 7.9 overall, 6.6 for whites, 11.6 for blacks. The infant mortality rate declined slightly from the previous year and is less than the previous five-year average of 9.6 (p. 5).

### Leading Causes of Death

Heart disease and cancer combined accounted for more than half of all deaths in 1995 and are the top two leading causes of death. The other leading causes ranked in order based on age-adjusted death rates per 100,000 persons were stroke, accidents, chronic obstructive pulmonary disease, AIDS/HIV, homicide, pneumonia/influenza, diabetes and suicide (p. 6). The leading cause of death based on years of potential life lost was accidents (p. 7). AIDS/HIV was the fastest growing cause of death in Davidson County during the period 1990 to 1995 (p. 8) and the leading cause of death for persons age 25 to 44 (p. 12). Homicide was the third leading cause of death for blacks (p. 11) and the leading cause of death for persons age 15 to 24 (p. 12). Mortality rates differed substantially between males and females, and blacks and whites. Male age-adjusted death rates were higher than those for females for each of the ten leading causes of death. Age-adjusted death rates for blacks were higher than those for whites for eight of the ten leading causes (p. 10).

### Comparison with Tennessee and United States

Davidson County age-adjusted death rates for 1995 are higher than the comparable Tennessee and U.S. rates by 4% and 20% respectively (p. 13). The infant mortality rate for Davidson County was 15% lower than the Tennessee rate but 4% higher than the rate for the United States (p. 14). The Davidson County age-adjusted death rates for the ten leading causes of death exceeded the comparable Tennessee rates on all causes except heart disease, stroke and accidents (p. 15). The Davidson County rates were higher than the United States rates on all ten causes (p. 16). Likewise the Davidson County rates exceed the national objectives for all eight of the leading causes of death for which there is a target rate established (p. 17).

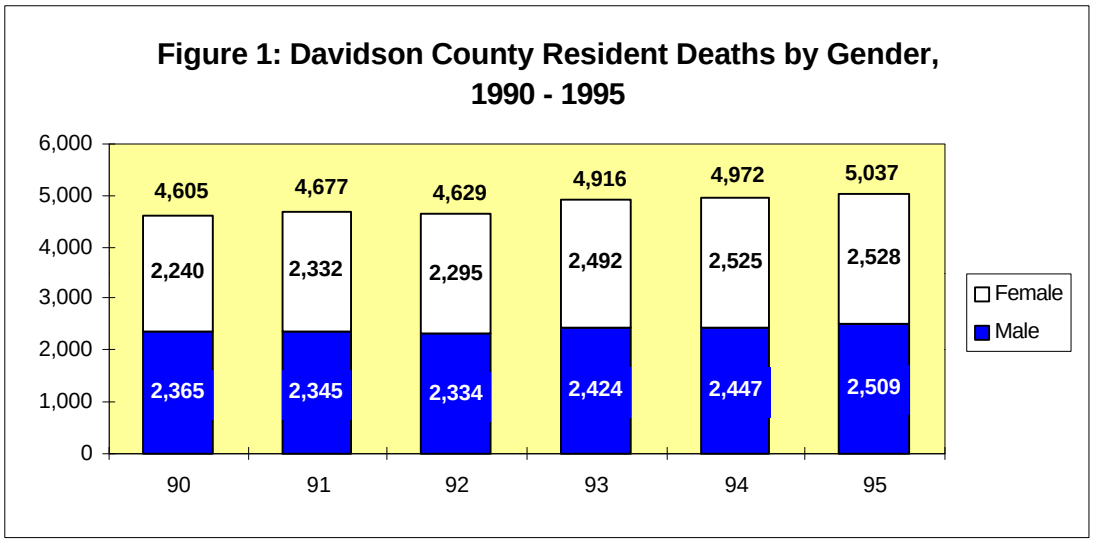
# Davidson County Mortality Report 1995

## Deaths and Deaths by Gender, Race and Age

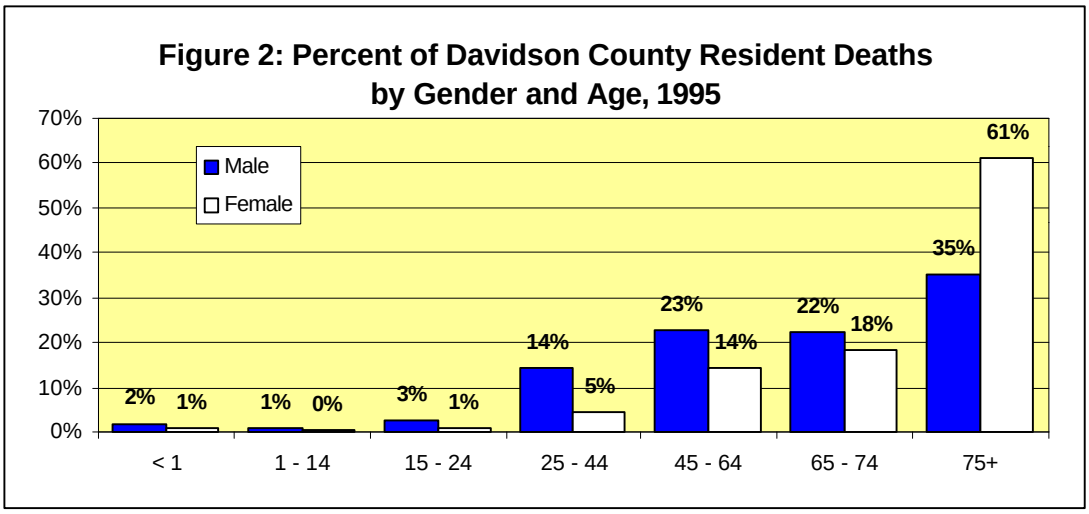
In 1995 there were 5,037 deaths among residents in Davidson County. Of these, 2,509 (49.8%) were males and 2,528 (50.2%) were females. As for race, 3,793 (75.3%) were white, 1,226 (24.3%) were black and 18 (0.35%) were of another race.

This distribution by gender and race parallels to a large extent the demographic distribution of the general population. The population of Davidson County was 510,784 in 1990 and was estimated to be 525,594 in 1995, a 2.9 percent increase. The racial composition in 1990 was 75% white, 23% black and 2% other. The proportion of blacks was estimated to have increased to 25% in 1995 while whites had dropped to 73%. The distribution by gender is estimated to be the same as in 1990, 47% male and 53% female. The percentage of persons age 65 and over is estimated to have dropped slightly in the 1990 to 1995 period. In 1990 there were 59,229 persons age 65 and over, 11.6% of the population. The estimate for 1995 is 59,532 persons and 11.3% of the population.

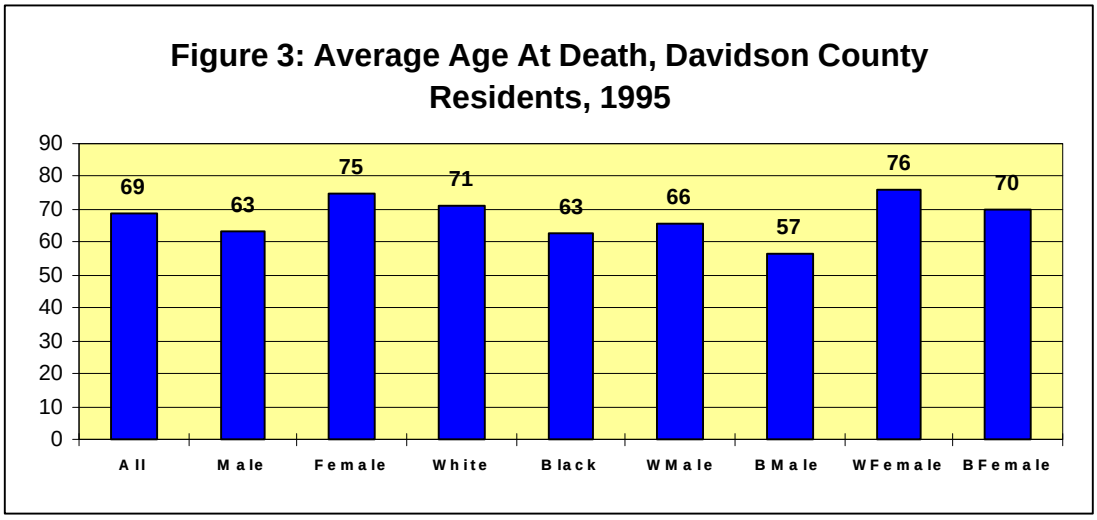
The number of deaths in Davidson County has increased each year since 1993 after having decreased slightly in 1992 (figure 1).




As for age at the time of death, more than two thirds (68%) of all Davidson County resident deaths in 1995 were of persons over age 64. A much larger percentage of male deaths occur at an earlier age than do female deaths. For males, 42% of all deaths occurred to persons under age 65 in contrast to only 21% for females. This results in a 63 average age at death for males and a 75 average age at death for females among Davidson County residents in 1995. See figures 2 and 3 on the next page.

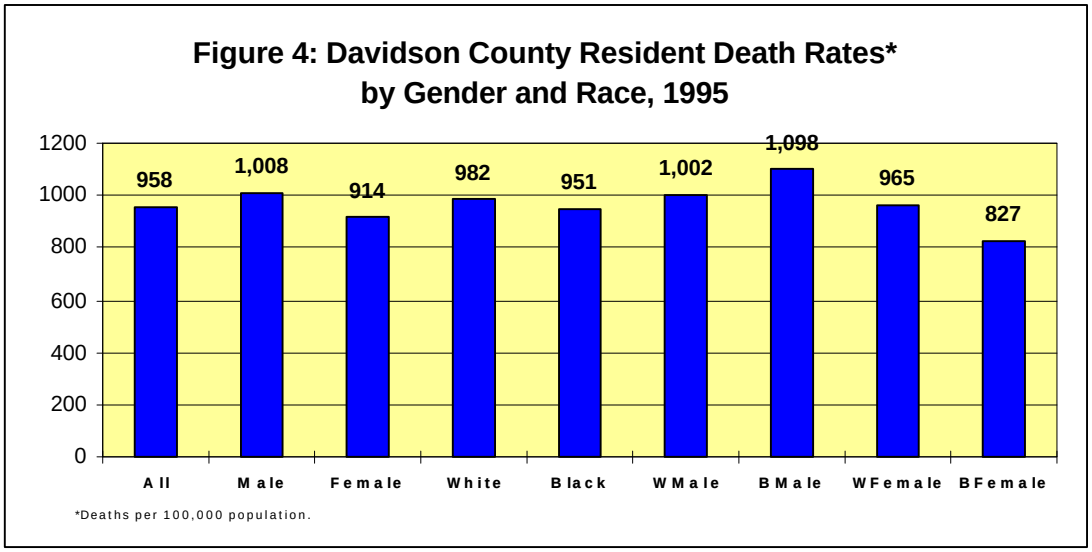



Likewise, a larger percentage of black deaths occur at earlier ages than do white deaths. This results in a 63 average age at death for blacks and a 71 average age at death for whites among Davidson County residents in 1995. The black male has the lowest average age at the time of death -- 57. See figure 3 below.

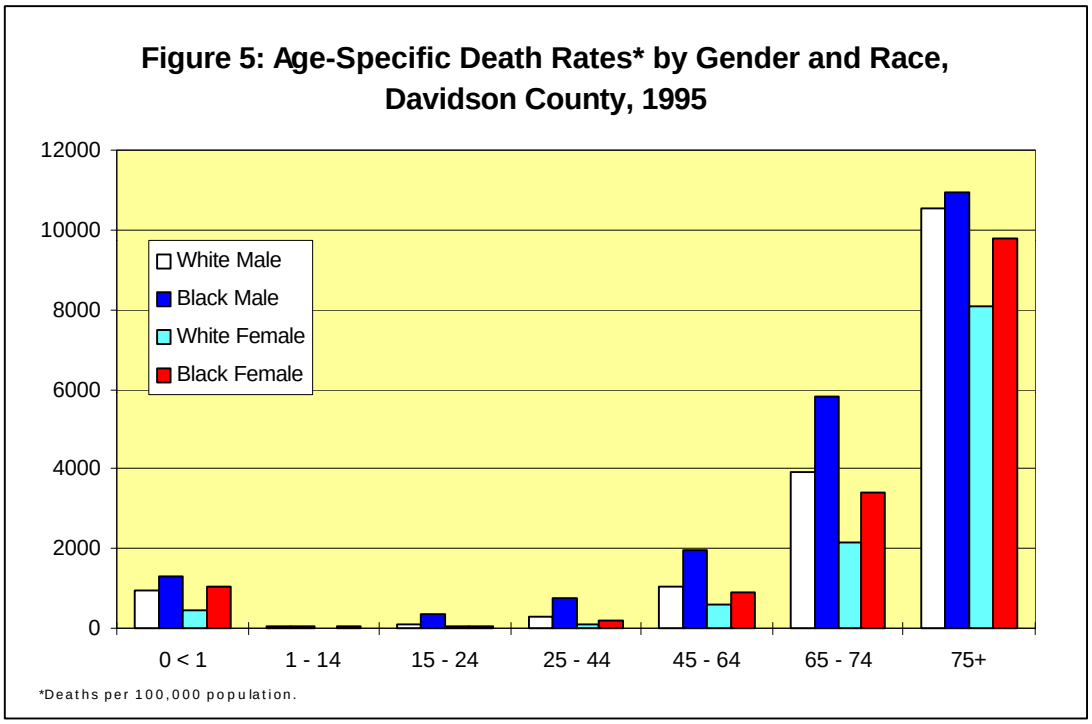



## Death Rates by Gender, Race and Age

The 1995 Davidson County crude death rates (deaths per 100,000 population) by gender and race are shown in figure 4 on the following page. The death rate for males (1,008) was 10% higher than females (914) and the death rate for whites (982) was 3% higher than for blacks (951). Black males had the highest death rate (1,098) while black females had the lowest death rate (827).




The age-specific death rates for Davidson County residents for 1995 can be seen in figure 5. As would be expected, the death rate was relatively high during the first year of life and then much lower until age 65 where it rose sharply. When stratified by age, gender and race, the black male had the highest death rate at each age grouping. The rate for white males and black females was about the same at each level with the white males having a slightly higher rate. White females enjoyed the lowest rate at all age levels.



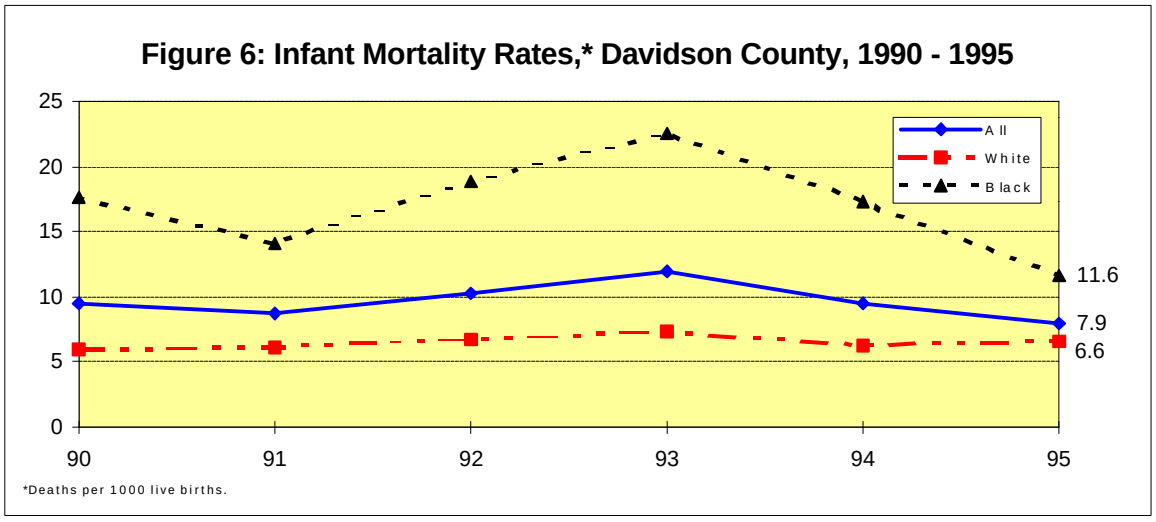
## Infant Mortality

In 1995 there were 65 infants who died before reaching their first birthday, 16.6% fewer infant deaths than in 1994. Among these 65 infants, 36 were white and 29 were black. The number of white infant deaths in 1995 was one more than the previous year while there were 13 fewer black deaths, a 31% difference from 1994. Table 1 shows the number of white and black infant deaths in Davidson County in the period 1990 to 1995. The number of white infant deaths has remained relatively steady with slight increases in 1992 and 1993. In contrast, the number of black infant deaths has fluctuated more widely with a drop in 1991, two large increases in 1992 and 1993 and large declines in 1994 and 1995.

**Table 1: Infant Deaths by Race in Davidson County, 1990 - 1995**

| Year | White | % Change | Black | % Change |
|---|---|---|---|---|
| 1990 | 36 | | 46 | |
| 1991 | 36 | 0 | 38 | (17.4) |
| 1992 | 38 | 5.5 | 48 | 26.3 |
| 1993 | 40 | 5.3 | 60 | 25 |
| 1994 | 35 | (12.5) | 42 | (30) |
| 1995 | 36 | 2.9 | 29 | (31) |

The 1995 infant mortality rate of 7.9 infant deaths per 1,000 live births was the lowest rate ever recorded for Davidson County. Figure 6 below depicts the infant mortality rates for all, white and black infants in Davidson County during the period 1990 to 1995. Because of the small number of deaths involved, fluctuations in the infant mortality rate from year to year are to be expected. As the figure shows, the rate increased slightly in 1992 and 1993 and then declined in 1994 and 1995. Most of this fluctuation was due to somewhat large changes in the black rate during these years. The white rate has remained roughly the same over this period. The historical gap between black and white infant mortality narrowed considerably in the last two years but is still large. In 1990, the black infant mortality rate was 17.7 compared to 6 for whites, a 295% higher rate. In 1995, the black rate was 176% higher, 11.6 for blacks and 6.6 for whites.



# Leading Causes of Death

## The Ten Leading Causes of Death in 1995

In this report age-adjusted rates are used to identify the ten leading causes of death. Table 2 shows these leading causes among Davidson County residents in 1995 and also shows their ranking according to the crude rate and the number of years of potential life lost. (See page 19 for a list of the ICD-9-CM and other identifying codes for each of these leading causes.)

**Table 2: Rank of Ten Leading Causes of Death in Davidson County, 1995**

| Cause | Age-Adjusted Rate | Crude Rate | Years Life Lost |
|---|---|---|---|
| Heart Disease | 1 | 1 | 4 |
| Cancer | 2 | 2 | 2 |
| Stroke | 3 | 3 | 7 |
| Accidents | 4 | 4 | 1 |
| COPD* | 5 | 6 | 10 |
| AIDS/HIV | 6 | 7 | 3 |
| Homicide | 7 | 9 | 5 |
| Pneumonia/Flu | 8 | 5 | 9 |
| Diabetes | 9 | 8 | 8 |
| Suicide | 10 | 10 | 6 |

*Chronic Obstructive Pulmonary Disease

As the table indicates, the years of potential life lost numbers results in rankings different from a ranking on simple numbers or the crude rate. Causes such as accidents, AIDS/HIV, homicide and suicide rank higher under these methods because of the high number of younger persons who die from these causes. Figures 7, 8 and 9 depict the ranking by the age-adjusted rate, crude rate, and the years of potential life lost for the ten leading causes of death among Davidson County residents in 1995.

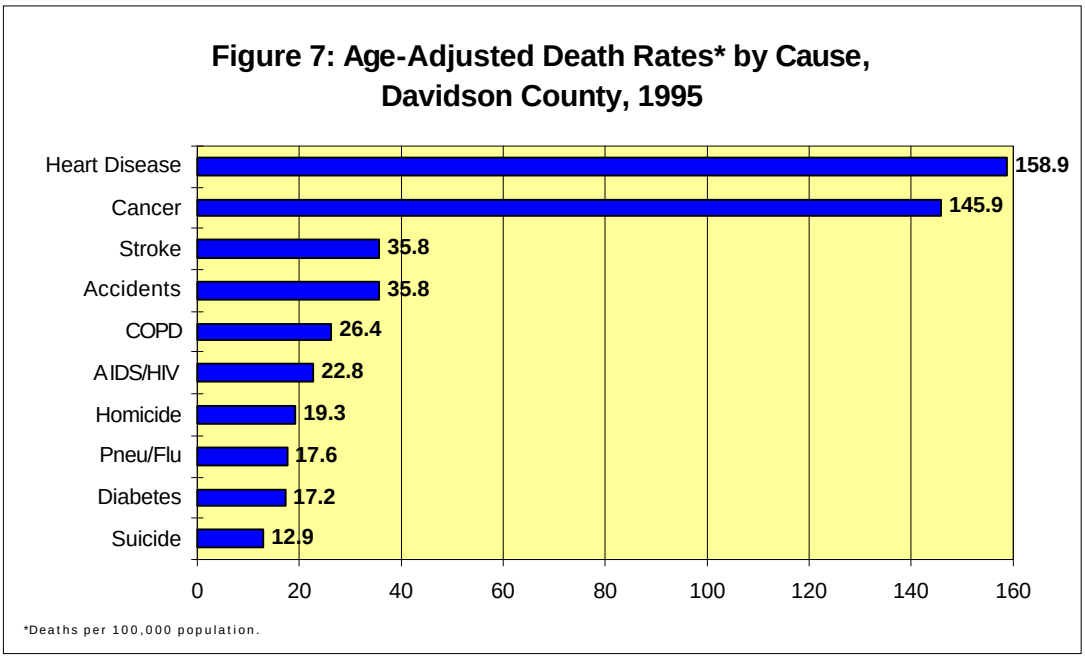
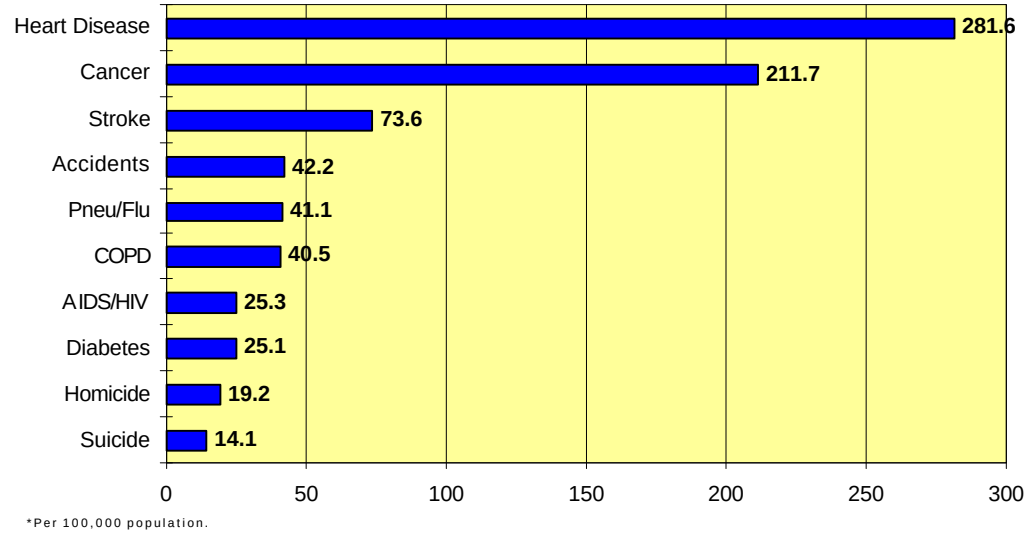
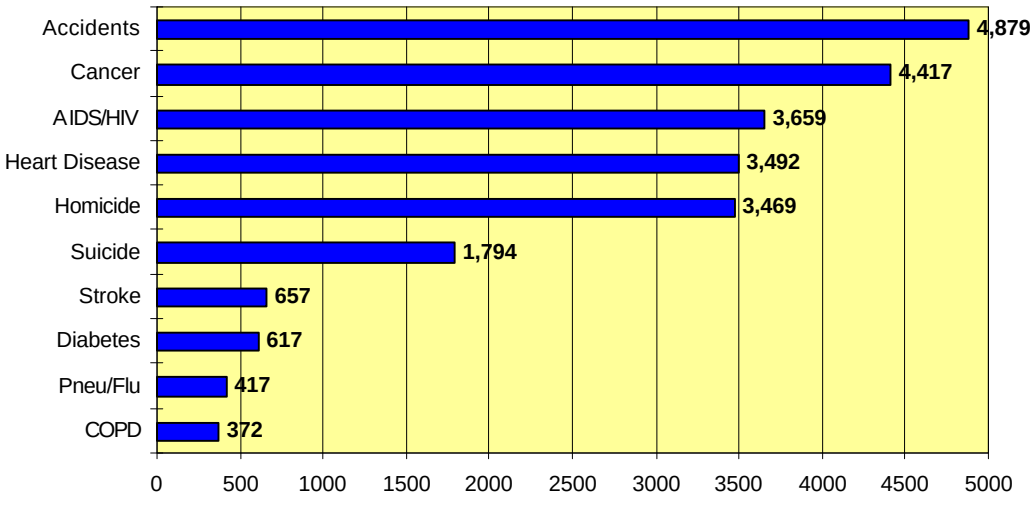


**Figure 8: Crude Death Rates* by Cause, Davidson County, 1995**



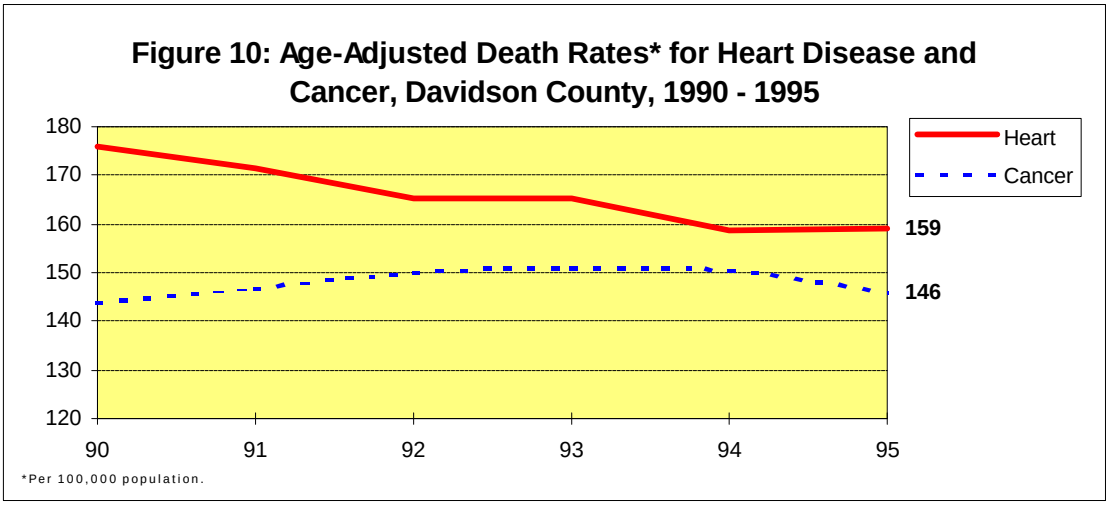

*Per 100,000 population.

**Figure 9: Years of Potential Life Lost by Cause of Death, Davidson County, 1995**



**1990 - 1995 Age-Adjusted Rates for the Ten Leading Causes of Death**

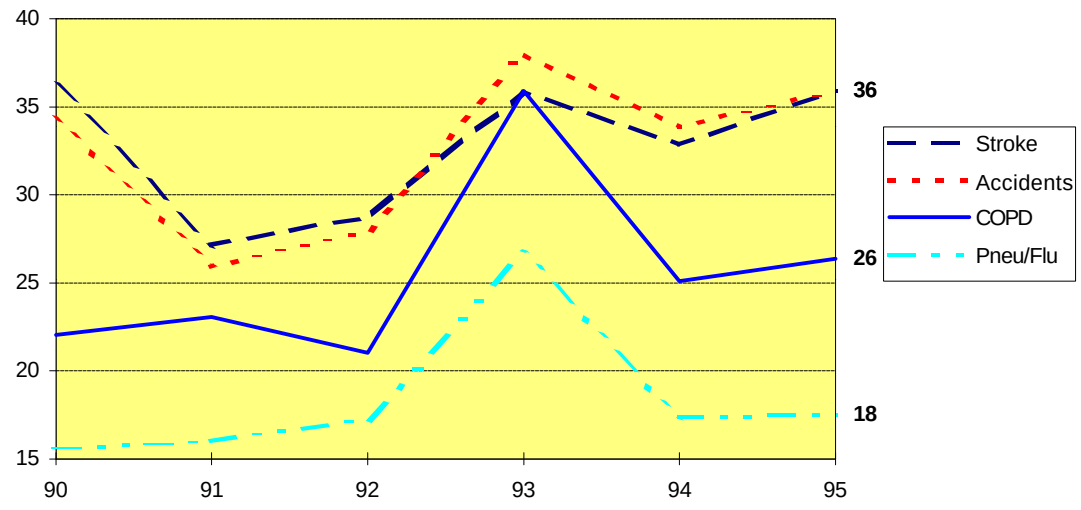
Of the ten leading causes of death in Davidson County, only deaths from heart disease show an overall decline during the 1990 to 1995 period. Figure 10 depicts the age-adjusted death rates for heart disease and cancer among residents of Davidson County for this period. The heart disease rate includes deaths from rheumatic fever and rheumatic heart disease, hypertensive heart disease, hypertensive heart and renal disease, ischemic heart disease and all other forms of heart disease. It does not include deaths from hypertension. The cancer disease rate includes deaths from all malignant neoplasms. As figure 10 indicates, the rate for heart disease decreased in 1991 and 1992, remained the same in 1993, decreased again in 1994 and remained the same in 1995. In contrast, the rate for cancer increased between 1990 and 1993 but has been decreasing since that date.




Figures 11 and 12 on the next page show the age-adjusted rates for the remaining eight leading causes of death for the period 1990 to 1995. The rates for strokes and accidents parallel one another closely. The rates declined from 1990 to 1991, rose for the next two years, dropped in 1994 and then rose again in 1995. Since 1991 the rates overall show an increasing trend for both stroke and accidents. The overall trends for chronic obstructive pulmonary disease and pneumonia/influenza are very much the same though the rates of COPD are consistently about 40% higher. These rates remained relatively the same for 1990 - 1992, rose sharply in 1993, declined sharply in 1994 and remained the same as the previous year in 1995.

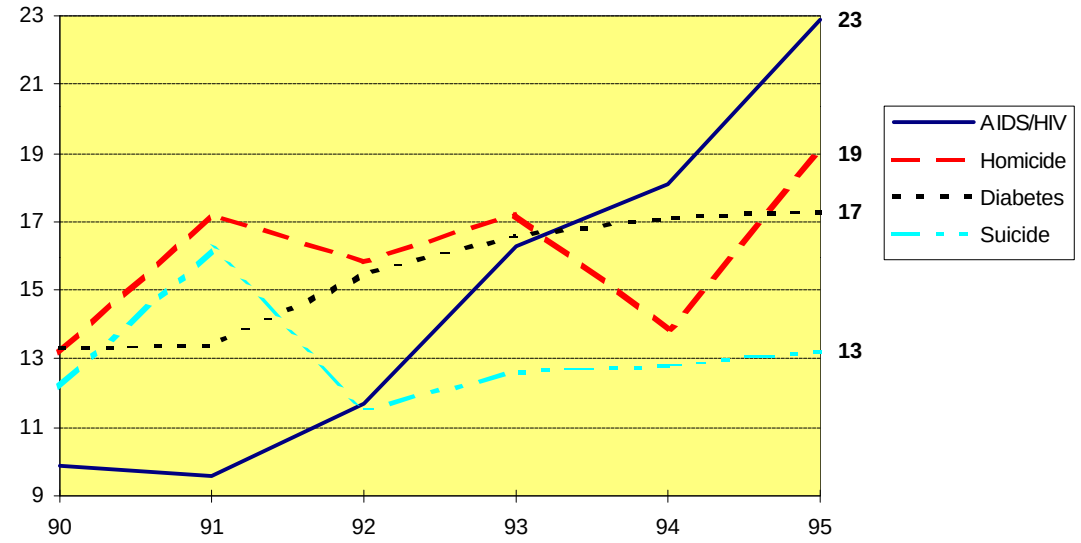
By contrast, the mortality rate from AIDS/HIV has shown a steady increase over the six year period. The rate rose from 10 in 1990 to 23 in 1995. AIDS/HIV was the tenth leading cause of death in 1990 and the sixth leading cause in 1995. The rate for homicide has fluctuated with a general upward trend. The rate in 1990 was 13 and had climbed to 19 by 1995, a 46% increase. By contrast, the rate for diabetes has increased each successive year since 1990. The rate had risen almost 30% higher in 1995 compared to 1990. The overall trend for suicide has been relatively stable. The rate rose in 1991 but dropped back in 1992 and since then has remained fairly constant.

**Figure 11: Age-Adjusted Death Rates* for Stroke, Accidents, COPD and Pneumonia/Influenza, Davidson County, 1990 - 1995**




*Per 100,000 population.

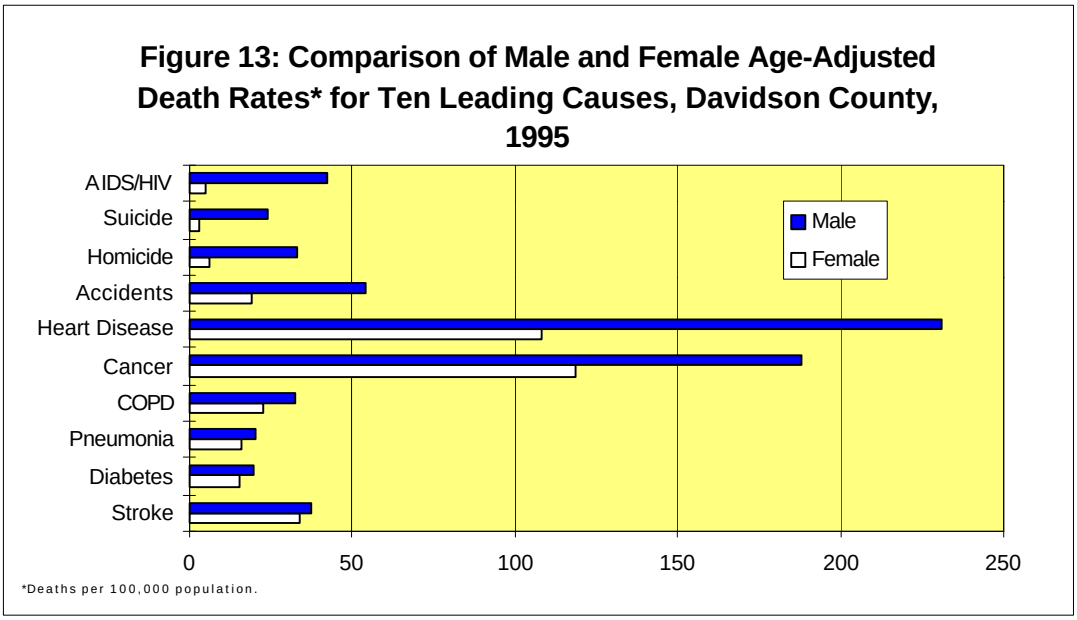
**Figure 12: Age-Adjusted Death Rates* for AIDS/HIV, Homicide, Diabetes and Suicide, Davidson County, 1990 - 1995**




*Per 100,000 population.

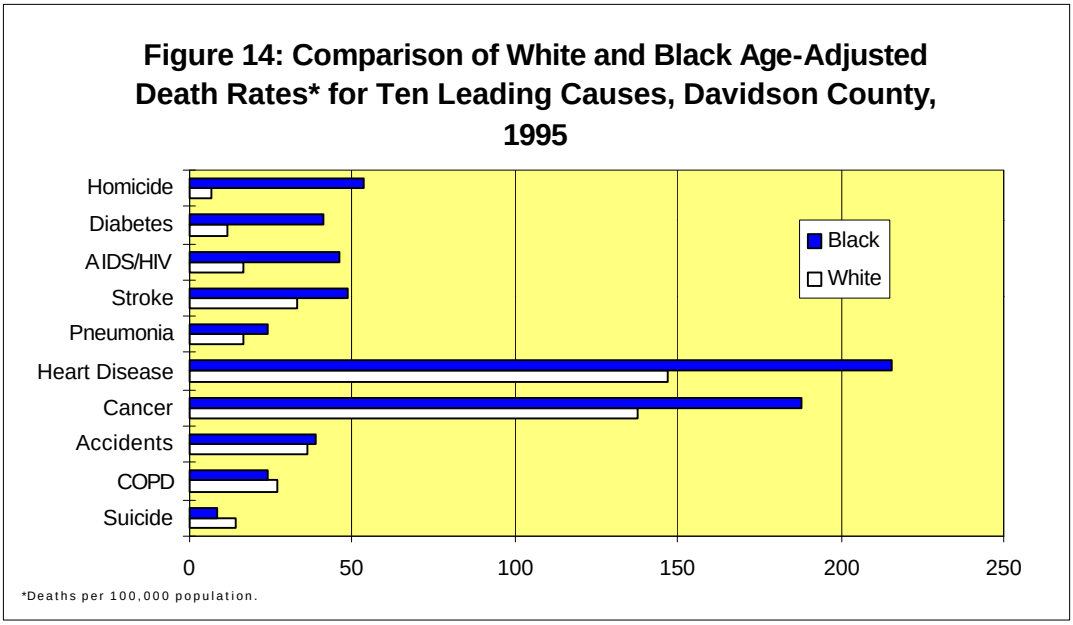
**Gender and Race Differences for the Ten Leading Causes of Death**

The death rates for these ten leading causes vary significantly by gender and race. The rates for males surpass those for females on all ten of these causes. The differences are most pronounced for AIDS/HIV (9 times as high), suicide (8 times as high), homicide (5 times as high), accidents (3 times as high) and heart disease (2 times as high). The differences are less pronounced for cancer (58% higher), COPD (40% higher), pneumonia/influenza (27% higher), diabetes (25% higher) and stroke (10% higher). The following figure depicts these differences in descending order of magnitude.




The differences in the rates for whites and blacks are also significant. The black rates surpass the white rates on eight of these ten leading causes. The exceptions are suicide and COPD. The black rate for suicide is slightly more than half the white rate and the black rate for COPD is 12% lower than the white rate. The most pronounced differences between the white and black rates are for homicide (black rate is 8 times higher), diabetes (4 times higher) and AIDS/HIV (3 times higher). Less pronounced are the differences for stroke (48% higher), pneumonia/influenza (48% higher), heart disease (46% higher), and cancer (37% higher). The black rate for accidents is only 6% higher than the white rate. Figure 14 on the next page depicts these differences among the white and black mortality rates.

The chart book in the appendix contains figures depicting the age-adjusted death rates for the ten leading causes for all, males, females, blacks and whites.




## The Ten Leading Causes of Death for Males, Females, Whites and Blacks

Because the death rates for specific causes for males, females, whites and blacks differ significantly, the top ten causes of death are different for each group. Table 3 lists the top ten causes of death for each of these groups in Davidson County in 1995 based on age-adjusted rates.

**Table 3: Ten Leading Causes of Death for Males, Females, Whites and Blacks, Davidson County, 1995**

| Rank | Males | Females | Whites | Blacks |
|---|---|---|---|---|
| 1 | Heart Disease | Cancer | Heart Disease | Heart Disease |
| 2 | Cancer | Heart Disease | Cancer | Cancer |
| 3 | Accidents | Stroke | Accidents | Homicide |
| 4 | AIDS/HIV | COPD | Stroke | Stroke |
| 5 | Stroke | Accidents | COPD | AIDS/HIV |
| 6 | Homicide | Pneu/Flu | Pneu/Flu | Diabetes |
| 7 | COPD | Diabetes | AIDS/HIV | Accidents |
| 8 | Suicide | Mental Disorders | Suicide | COPD |
| 9 | Pneu/Flu | Neurological Disorders | Mental Disorders | Pneu/Flu |
| 10 | Diabetes | Genitourinary Disease | Diabetes | Genitourinary Disease |

A comparison of the leading causes of death for males and females finds there are considerable differences. The fourth, seventh and eighth leading causes of death for males (AIDS/HIV, homicide and suicide) do not make the top ten list for females. Likewise, the eighth, ninth and tenth leading causes for females (mental disorders, neurological disorders and genitourinary disease) do not appear on the male list. Furthermore, the rank order of the two lists differ somewhat with cancer being the leading cause for females while heart disease is the leading cause for males. The relative positions of stroke and accidents also are reversed on the two lists.

A comparison of the leading causes of death for whites and blacks finds similar differences. For example, there are two causes on the top ten list for whites (suicide and mental disorders) that do not appear on the black list and there are two causes (homicide and genitourinary disease) that appear on the black list and not on the white. Probably the most striking difference between the two lists is the deaths from homicide. Homicide was the third leading cause of death among blacks in Davidson County in 1995. The age-adjusted rate was 53.6 deaths per 100,000. In contrast, the age-adjusted death rate for whites from homicide in 1995 was 6.9 deaths per 100,000. There is also a pronounced difference between whites and blacks in regard to suicide. Suicide was the eighth leading cause of death among whites and was not among the top ten for blacks. The age-adjusted rate for whites in 1995 was 14.1 deaths per 100,000. The comparable rate for blacks was 8.9 per 100,000.

**Leading Causes of Death by Age**

The leading causes of death vary significantly by age. The primary causes of death among Davidson County infants (children under age one) in 1995 were prematurity and conditions associated with low birth weight. For those who died after the first month of life, sudden infant death syndrome (SIDS) was the leading cause of infant mortality.

The leading cause of death among children age 1 - 14 in 1995 among Davidson County residents was unintentional injury (accidents). More than one third (37%) of all deaths in this age category were from accidents and more than half of these were from motor vehicles. Homicide was the second leading cause, followed by cancer.

The leading cause of death among Davidson County residents age 15 to 24 in 1995 was homicide which accounted for 38% of all deaths. Accidents was the second leading cause with 34% of all deaths. Of these, most (73%) were motor vehicle accidents. Ten percent of deaths in this age group was due to suicide.

Deaths from AIDS/HIV led all causes among Davidson County residents age 25 - 44 in 1995. These deaths accounted for 22% of the total. The second leading cause was accidents with 16%.

The leading causes of death among Davidson County residents age 45 - 64 are more like that of the population as a whole. In 1995, cancer was first with 33% followed by heart disease with 26%.

As for Davidson County residents in the age 65 - 74 category, heart disease was the leading cause with 33% of all deaths followed closely by cancer at 31%.

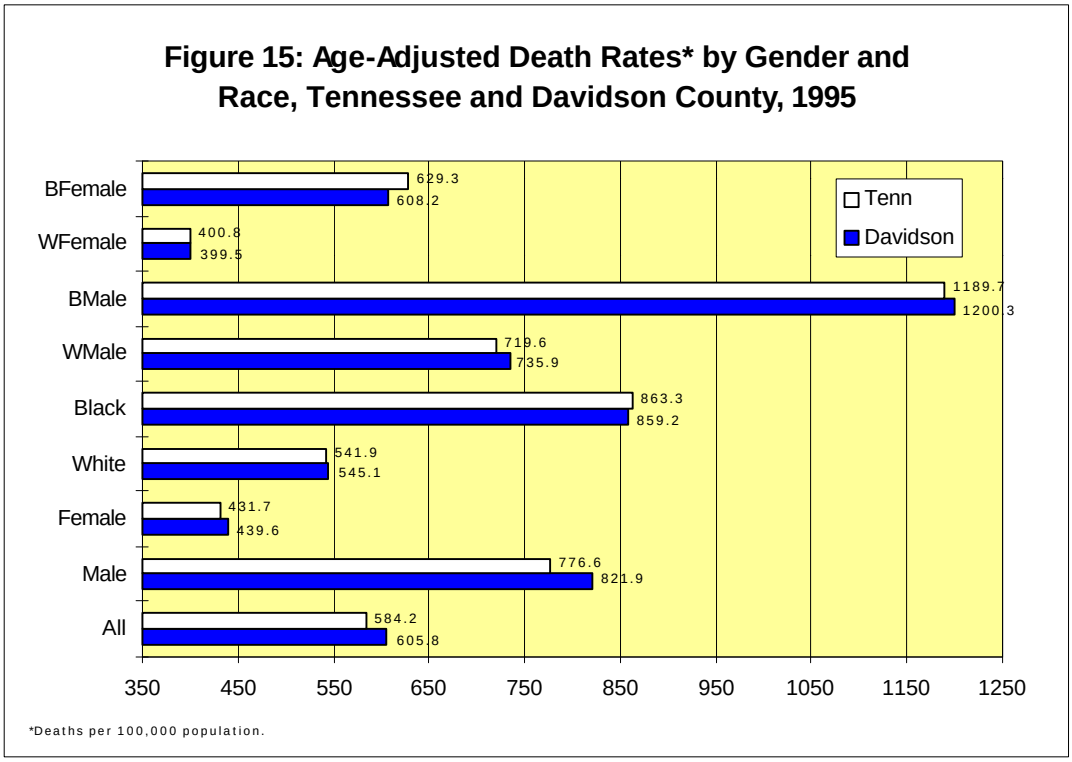
Among Davidson County residents age 75 and above, heart disease and cancer continue to be the leading causes of death and account for more than half of all deaths (53%).

The chart book in the appendix contains figures depicting the leading causes of death for each of these age groups.

# Comparison of Davidson County With Tennessee and United States

## Death Rates by Gender and Race

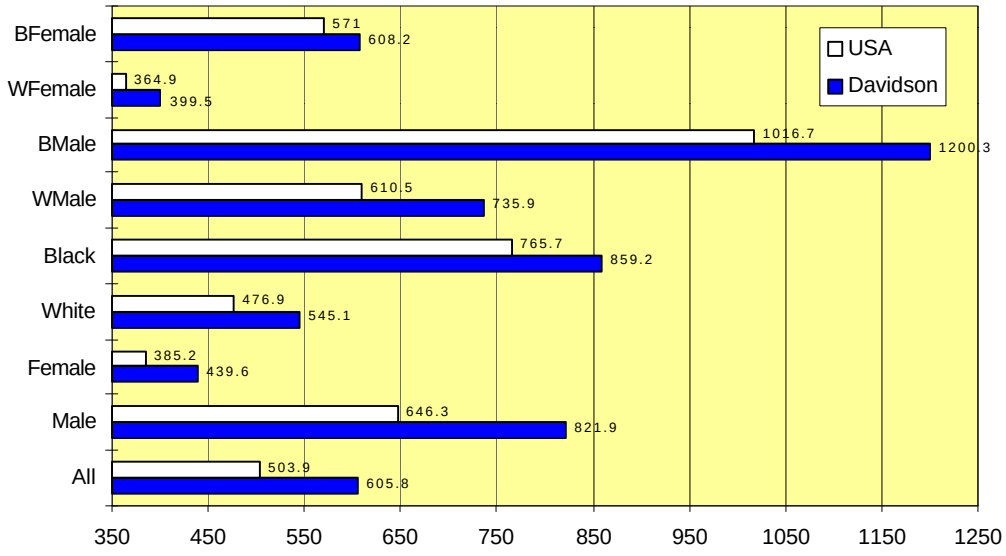
The overall age-adjusted death rate for Davidson County in 1995 was 605.8 per 100,000 while the rate for Tennessee was 584.2, a 4% difference. The age-adjusted death rates in Davidson County were also higher than the comparable rates in Tennessee for males, females, whites, white males and black males. The Davidson County rates were lower than the comparable Tennessee rates for blacks, white females and black females. It should be noted, however, that all of these differences were relatively small. See figure 15.




When compared to the United States, the age-adjusted death rates for Davidson County in 1995 as a whole and for each race and gender category were substantially higher. The overall age-adjusted death rate for Davidson County was 20% higher than the rate for the United States, 605.8 to 503.9 respectively. The largest difference among the race and gender categories was for males. The male age-adjusted death rate for the country was 646.3 while the rate for Davidson County was 821.9, a 27% higher rate.

The percent differences for other categories were as follows: white males (21% higher), black males (18% higher), whites (14% higher), females (14% higher), white females (9% higher), blacks (12% higher) and black females (7% higher). These data suggest that persons living in Davidson County are at greater risk of death than persons in the United States as a whole. However, these differences may be due to the different demographic characteristics of an urban region versus a region with both urban and rural areas. Figure 16 below shows the age-adjusted death rates for the United States and Davidson County.

**Figure 16: Age-Adjusted Death Rates* by Gender and Race, USA and Davidson County, 1995**

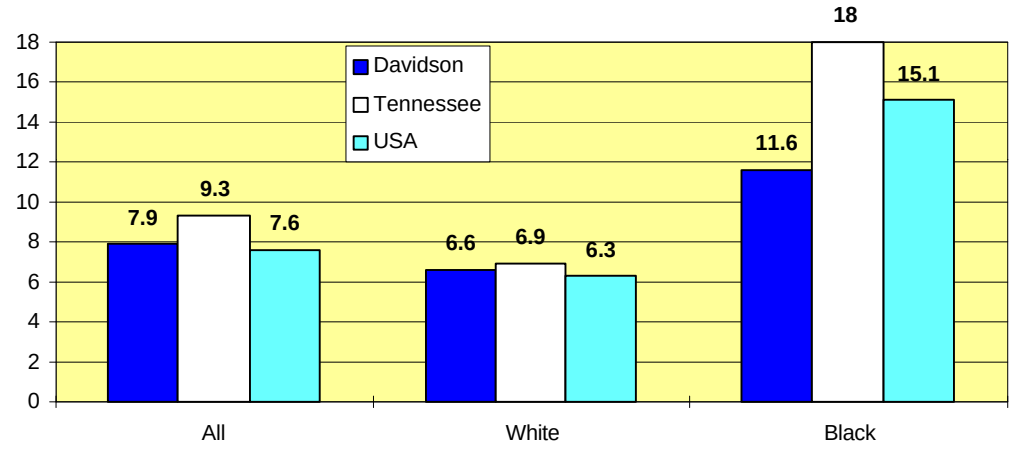



*Deaths per 100,000 population.

## Infant Mortality

The infant mortality rate for Davidson County in 1995 was 15% lower than the rate for Tennessee but slightly higher (4%) than the rate for the United States. The respective rates were 7.9, 9.3 and 7.6 per 1,000 live births. The infant mortality rate for whites was likewise slightly lower (4%) in Davidson County than in Tennessee but was slightly higher (4.5%) than the rate for the United States. In contrast, the black infant mortality rate for Davidson County in 1995 was considerably lower than the comparable rates for both Tennessee and the United States. The black rate in Davidson County was 11.6, 36% lower than Tennessee (18) and 23% lower than United States (15.1). Figure 17 on the next page depicts the infant mortality rates for Davidson County, Tennessee and the United States by race for 1995.

**Figure 17: Infant Mortality Rates* for Davidson County, Tennessee and USA, 1995**

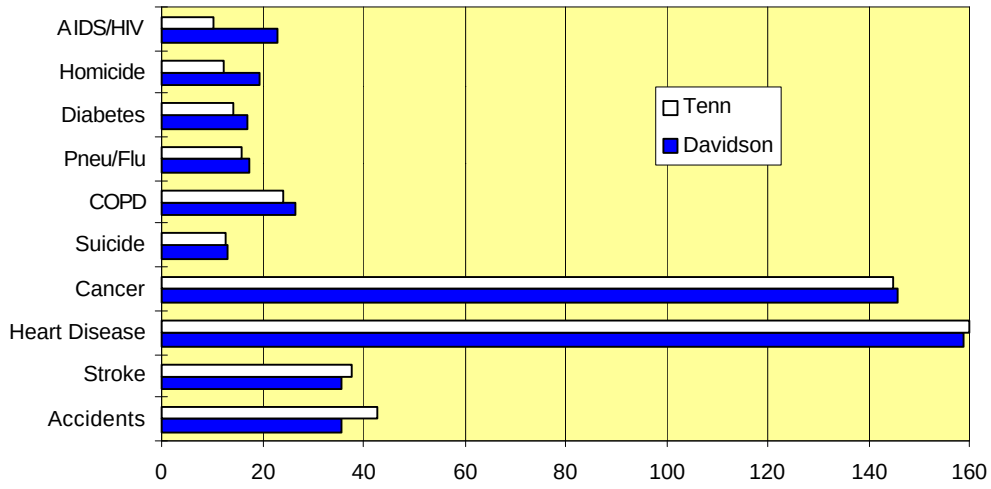



*Deaths per 1000 live births.

## Ten Leading Causes of Death

The Davidson County age-adjusted death rates for five of the ten of the leading causes of death were clearly higher in 1995 than the comparable Tennessee rates. These include AIDS/HIV (121% higher), homicide (60% higher), diabetes (21% higher), pneumonia/influenza (11% higher) and COPD (9% higher). The rates for suicide, cancer and heart disease were virtually the same. The Davidson County rate for stroke was slightly less (5%) while the rate for accidents was 16% less than the Tennessee rate. See figure 18.

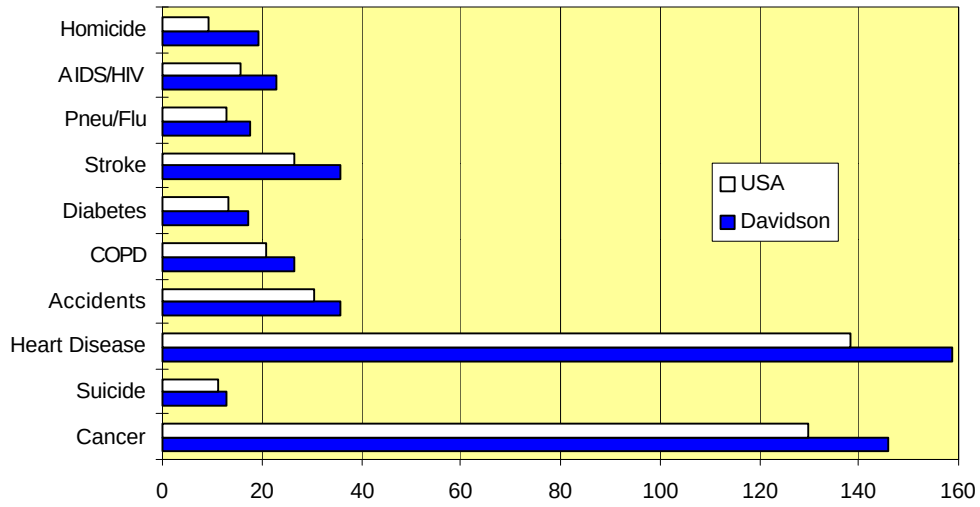
**Figure 18: Comparison of the Age-Adjusted Death Rates* for the Ten Leading Causes of Death In Davidson County With the Tennessee Rates, 1995**




*Per 100,000 population.

The age-adjusted death rates for all ten of the leading causes of death in Davidson County were higher than the comparable rates for the United States. The percentage difference between the Davidson County rates and the Unites States rates ranges from 12% to 105%. The largest differences were for homicide and AIDS/HIV. The Davidson County homicide rate was twice that of the United States rate. The AIDS/HIV rate for Davidson County was 46% higher than the United States rate. (Both homicide and AIDS/HIV are more prevalent in large urban centers that may in part account for these large differences.) Figure 19 compares the Davidson County rates with the United States rates for all ten causes.

**Figure 19: Comparison of the Age-Adjusted Death Rates* for the Ten Leading Causes of Death in Davidson County with the United States Rates, 1995**




*Deaths per 100,000 population.

## Comparison of Davidson County With National Objectives

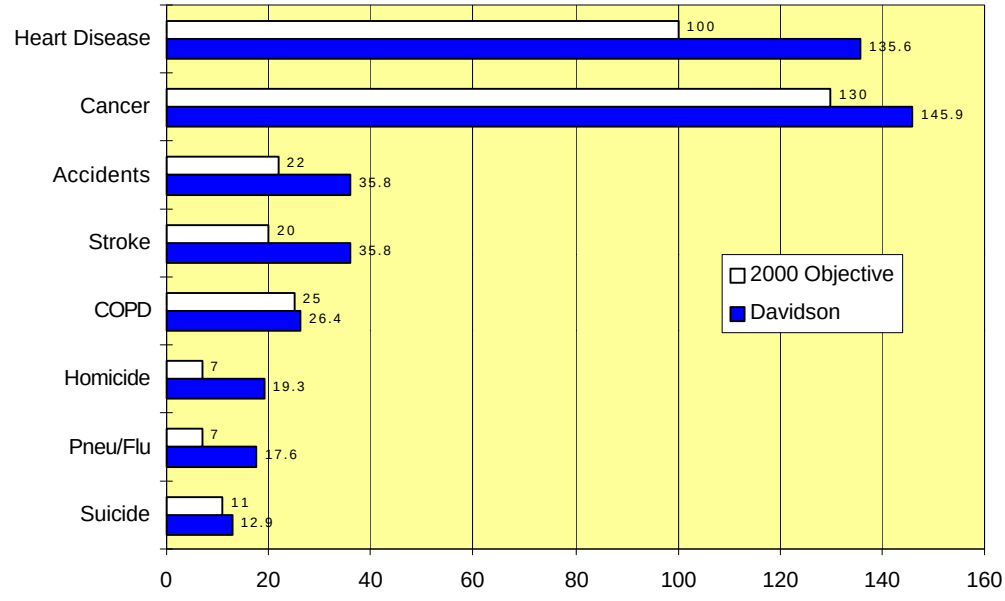
The United States has established national objectives related to health. These are known as the Healthy People 2000 objectives. Among these are target age-adjusted death rates for leading causes of death. Targets have been established for eight of the ten leading causes of death in Davidson County. Targets have not been established for AIDS/HIV and diabetes. Table 4 on the following page shows the age-adjusted death rates for the other eight leading causes in Davidson County, the year 2000 objective and the percentage difference between the two. In all cases the 1995 Davidson County rate exceeds the year 2000 national target. The percentage difference between the Davidson County rate and the year 2000 target ranges from 6% for COPD to 176% for homicide.

**Table 4: Percent Difference in Age-adjusted Death Rates for Leading Causes in Davidson County in 1995 and the United States Objective for 2000**

| Cause | Davidson County Rate | US Objective | % Difference |
|---|---|---|---|
| Heart Disease | 135.6 | 100 | 36% |
| Cancer | 145.9 | 130 | 12% |
| Accidents | 35.8 | 22 | 63% |
| Stroke | 35.8 | 20 | 79% |
| COPD | 26.4 | 25 | 6% |
| Homicide | 19.3 | 7 | 176% |
| Pneu/Flu | 17.6 | 7 | 151% |
| Suicide | 12.9 | 11 | 17% |

Figure 20 depicts the differences between the Davidson County rates in 1995 and the year 2000 objectives for the eight leading causes.

**Figure 20: Age-Adjusted Death Rates* for Leading Causes of Death in Davidson County in 1995 Compared to the Year 2000 Objectives**



# Technical Notes

## Data Sources

Data shown in this report for 1995 are based on information from all death certificates filed in Davidson County, Tennessee and the United States. The Tennessee Department of Health provides the Davidson County and Tennessee data to the Metropolitan Health Department of Nashville and Davidson County. The data for the United States was obtained from the Report of Final Mortality Statistics, 1995 published by the National Center for Health Statistics, Centers for Disease Control, Monthly Vital Statistics Report, Vol. 45, No. 11, Supplement 2, June 12, 1997. Healthy People 2000 objectives included in this report were obtained from Healthy People 2000, National Health Promotion and Disease Prevention Objectives published by the Public Health Service, U.S. Department of Health and Human Services, 1990. Population estimates used to calculate mortality rates were prepared by the Department of Sociology, University of Tennessee and provided and adjusted by the Bureau of Information Resources, Tennessee Department of Health.

## Definitions of Terms

*Infant deaths* – Deaths of infants aged under 1 year.

*Crude death rate* – Total deaths per 100,000 population for a specified period. The crude death rate represents the average chance of dying during a specified period for persons in the entire population.

*Age-specific death rate* – Deaths per 100,000 population in a specified age group, such as 1 – 14 years or 15 – 24 years for a specified period.

*Age-adjusted death rate* – The death rate used to make comparisons of relative mortality risks across groups and over time. The age-adjusted rate of one area or group can be compared to the age-adjusted rate of another area or group with confidence that differences in the rates of the two areas do not stem from differences in the age structure of their populations. The age-adjusted rates presented in this report were computed by the direct method, that is, by applying the age-specific death rates for a given cause of death to the U. S. standard population for 1940.

*Years of potential life lost* – An indicator used to determine the relative number of years of potential life lost for a specific cause of mortality. This number is calculated by subtracting the age of death from 65.

*Infant mortality rate* – The number of infant deaths per 1,000 live births occurring during the same year.

*Stroke* – In this report *stroke* is used to refer to cerebrovascular disease which is a set of diseases of the vascular system (which conveys blood throughout the body) that affect the supply of oxygen to the brain, thereby damaging brain cells.

*AIDS/HIV* – All deaths with the underlying cause of death identified as Human Immunodeficiency Virus (HIV) infection. Deaths due to Acquired Immune Deficiency Syndrome (AIDS), AIDS-like syndrome, or “other HIV infection” are all included with this category.

## Leading Causes of Death

This report follows the National Center for Health Statistics disease classification groupings for identifying leading causes of death. The following table lists the ICD-9-CM or other identifying codes for the diseases included in these groupings.

**Identifying Codes for Leading Causes of Death Disease Groups**

| Disease Group | ICD-9-CM or Other Identifying Codes |
|---|---|
| Heart Disease | 390–398, 402, 404, 410–414, 415–429 |
| Cancer | 140–208 |
| Stroke (cerebrovascular disease) | 430–438 |
| Accidents | E800–E807, E810–E949 |
| Chronic Obstructive Pulmonary Disease (COPD) | 490–496 |
| AIDS/HIV | 042–044 |
| Homicide | E960–E978 |
| Pneumonia/Influenza | 480–487 |
| Diabetes | 250 |
| Suicide | E950–E959 |

The ICD-9-CM codes used by the Healthy People 2000 target objective are slightly different. They are 402, 410 – 414 and 429.2. These codes were used to calculate the heart disease rate in Davidson County used in table 4 and figure 20 on page 17.

# List of Tables and Figures

## Tables



## List of Figures

# Appendix

## Tables



## Chart Book

# Table A1: Number of Deaths and Death Rates by Race and Gender, Davidson County, 1990 - 1995

| Year | All | Male | Female | White | White Male | White Female | Black | Black Male | Black Female | Other | Other Male | Other Female |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Number | | | | | | |
| 1995 | 5,037 | 2,509 | 2,528 | 3,793 | 1,849 | 1,944 | 1,226 | 648 | 578 | 18 | 12 | 6 |
| 1994 | 4,972 | 2,447 | 2,525 | 3,808 | 1,807 | 2,001 | 1,141 | 627 | 514 | 23 | 13 | 10 |
| 1993 | 4,916 | 2,424 | 2,492 | 3,640 | 1,770 | 1,870 | 1,261 | 647 | 614 | 15 | 7 | 8 |
| 1992 | 4,629 | 2,334 | 2,295 | 3,446 | 1,700 | 1,746 | 1,164 | 623 | 541 | 19 | 11 | 8 |
| 1991 | 4,677 | 2,345 | 2,332 | 3,564 | 1,784 | 1,780 | 1,102 | 554 | 548 | 11 | 7 | 4 |
| 1990 | 4,605 | 2,365 | 2,240 | 3,458 | 1,733 | 1,725 | 1,129 | 620 | 509 | 18 | 12 | 6 |
| | | | | | | Death Rate* | | | | | | |
| 1995 | 958.3 | 1,007.8 | 913.8 | 982.4 | 1,001.8 | 964.6 | 950.9 | 1,097.8 | 826.8 | 170.2 | 223.3 | 115.4 |
| 1994 | 951.4 | 988.1 | 918.3 | 988.6 | 981.3 | 995.2 | 898.5 | 1,077.2 | 747.3 | 220.9 | 245.4 | 195.5 |
| 1993 | 946.0 | 983.9 | 911.9 | 947.1 | 963.2 | 932.2 | 1,008.3 | 1,127.3 | 907.3 | 146.3 | 134.0 | 159.1 |
| 1992 | 896.7 | 952.4 | 846.4 | 898.6 | 927.2 | 872.5 | 945.3 | 1,101.2 | 812.8 | 188.3 | 213.6 | 161.9 |
| 1991 | 910.4 | 961.9 | 863.8 | 931.5 | 975.1 | 891.5 | 909.2 | 993.5 | 837.3 | 110.7 | 137.8 | 82.4 |
| 1990 | 901.6 | 975.3 | 834.9 | 905.9 | 949.3 | 866.0 | 946.6 | 1,128.4 | 791.2 | 184.2 | 239.9 | 125.8 |
| | | | | | | Age-Adjusted Death Rate* | | | | | | |
| 1995 | 605.8 | 821.9 | 439.6 | 545.1 | 735.9 | 399.5 | 859.2 | 1,200.3 | 608.2 | | | |
| 1994 | 594.8 | 799.2 | 443.0 | 544.7 | 720.0 | 413.6 | 797.1 | 1,137.2 | 560.3 | | | |
| 1993 | 607.5 | 802.8 | 462.8 | 535.2 | 713.8 | 403.9 | 907.4 | 1,203.8 | 694.5 | | | |
| 1992 | 574.6 | 779.8 | 423.5 | 511.4 | 692.5 | 376.8 | 845.4 | 1,178.1 | 613.4 | | | |
| 1991 | 576.7 | 781.8 | 426.4 | 526.8 | 723.9 | 384.3 | 798.5 | 1,053.7 | 611.0 | | | |
| 1990 | 579.5 | 794.1 | 424.8 | 523.0 | 714.1 | 385.3 | 821.3 | 1,149.5 | 591.7 | | | |

* Number of deaths per 100,000 population. Population estimates prepared by the Department of Sociology, University of Tennessee and provided and adjusted by the Tennessee Department of Health.

# Table A2: Number of Deaths and Death Rates by Age, Race and Gender, Davidson County, 1990 - 1995

| Age | All | Male | Female | White | White Male | White Female | Black | Black Male | Black Female |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Number | | | | | |
| All ages | 5,037 | 2,509 | 2,528 | 3,793 | 1,849 | 1,944 | 1,226 | 648 | 578 |
| Under 1 | 65 | 41 | 24 | 36 | 25 | 11 | 29 | 16 | 13 |
| 1 - 14 | 30 | 20 | 10 | 15 | 11 | 4 | 11 | 5 | 6 |
| 15 - 24 | 89 | 71 | 18 | 43 | 32 | 11 | 45 | 38 | 7 |
| 25 - 44 | 472 | 357 | 115 | 287 | 216 | 71 | 182 | 140 | 42 |
| 45 - 64 | 931 | 570 | 361 | 662 | 404 | 258 | 266 | 164 | 102 |
| 65 - 74 | 1,017 | 557 | 460 | 769 | 430 | 339 | 245 | 127 | 118 |
| 75 and up | 2,425 | 886 | 1,539 | 1,975 | 726 | 1,249 | 447 | 157 | 290 |
| | | | | Death Rate* | | | | | |
| All ages | 958.3 | 1,007.8 | 913.8 | 982.4 | 1,001.8 | 964.6 | 950.9 | 1,097.8 | 826.8 |
| Under 1 | 846.6 | 1,052.6 | 634.4 | 713.7 | 969.7 | 446.1 | 1,182.2 | 1,306.1 | 1,058.6 |
| 1 - 14 | 30.6 | 39.9 | 20.9 | 23.8 | 34.0 | 13.0 | 33.9 | 30.3 | 37.5 |
| 15 - 24 | 116.8 | 189.1 | 46.6 | 83.9 | 124.9 | 42.9 | 196.2 | 351.7 | 57.7 |
| 25 - 44 | 261.8 | 407.1 | 124.2 | 212.5 | 321.1 | 104.8 | 440.9 | 759.4 | 183.9 |
| 45 - 64 | 900.9 | 1,183.9 | 647.8 | 802.4 | 1,039.0 | 591.4 | 1,344.9 | 1,936.0 | 902.1 |
| 65 - 74 | 3,112.6 | 4,205.4 | 2,367.6 | 2,862.5 | 3,913.4 | 2,135.2 | 4,359.4 | 5,841.8 | 3,424.3 |
| 75 and up | 9,029.0 | 10,605.7 | 8,317.1 | 8,828.4 | 10,538.5 | 8,067.4 | 10,161.4 | 10,940.8 | 9,784.1 |

* Number of deaths per 100,000 population. Population estimates prepared by the Department of Sociology, University of Tennessee and provided and adjusted by the Tennessee Department of Health.

# Table A3: Number of Deaths, Death Rates and Age-Adjusted Death Rates for Ten Leading Causes of Death by Race and Gender, Davidson County, 1995

| Rank* | Cause of death | All | Male | Female | White | Black |
|---|---|---|---|---|---|---|
| | | | | Number | | |
| 1 | Heart Disease | 1,480 | 730 | 750 | 1,149 | 327 |
| 2 | Cancer | 1,113 | 563 | 550 | 853 | 255 |
| 3 | Stroke | 387 | 129 | 258 | 314 | 73 |
| 4 | Accidents | 222 | 150 | 72 | 170 | 50 |
| 5 | Pneumonia/Influenza | 216 | 79 | 137 | 165 | 51 |
| 6 | COPD | 213 | 101 | 112 | 183 | 30 |
| 7 | AIDS/HIV | 133 | 119 | 14 | 73 | 60 |
| 8 | Diabetes | 132 | 59 | 73 | 78 | 54 |
| 9 | Homicide | 102 | 83 | 18 | 30 | 70 |
| 10 | Suicide | 74 | 65 | 9 | 62 | 12 |
| | | | | Death Rate** | | |
| 1 | Heart Disease | 281.6 | 293.2 | 271.1 | 297.6 | 253.6 |
| 2 | Cancer | 211.7 | 226.1 | 198.8 | 220.9 | 197.8 |
| 3 | Stroke | 73.6 | 51.8 | 93.3 | 81.3 | 56.6 |
| 4 | Accidents | 42.2 | 60.2 | 26.1 | 44.0 | 38.8 |
| 5 | Pneumonia/Influenza | 41.1 | 31.7 | 49.5 | 42.7 | 39.6 |
| 6 | COPD | 40.5 | 40.6 | 40.5 | 47.4 | 23.3 |
| 7 | AIDS/HIV | 25.3 | 47.8 | 5.1 | 18.9 | 46.5 |
| 8 | Diabetes | 25.1 | 23.7 | 26.4 | 20.2 | 41.9 |
| 9 | Homicide | 19.2 | 33.3 | 6.5 | 7.8 | 54.3 |
| 10 | Suicide | 14.1 | 26.1 | 3.3 | 16.1 | 9.3 |
| | | | | Age-Adjusted Death Rate*** | | |
| 1 | Heart Disease | 158.9 | 230.8 | 108.1 | 147.1 | 215.3 |
| 2 | Cancer | 145.9 | 187.9 | 118.6 | 137.5 | 187.8 |
| 3 | Stroke | 35.8 | 37.5 | 34.0 | 32.9 | 48.7 |
| 4 | Accidents | 35.8 | 54.3 | 19.1 | 36.3 | 38.5 |
| 5 | COPD | 26.4 | 32.3 | 23.0 | 27.0 | 23.7 |
| 6 | AIDS/HIV | 22.8 | 42.2 | 4.8 | 16.5 | 45.9 |
| 7 | Homicide | 19.3 | 33.0 | 6.2 | 6.9 | 53.6 |
| 8 | Pneumonia/Influenza | 17.6 | 20.4 | 16.1 | 16.4 | 24.2 |
| 9 | Diabetes | 17.2 | 19.5 | 15.6 | 11.9 | 41.3 |
| 10 | Suicide | 12.9 | 24.0 | 3.1 | 14.1 | 8.9 |

*Ranking is in descending order based on column "All".

**Number of deaths per 100,000 population.

***Number of deaths per 100,000 population age-adjusted.

# Table A4: Age-Adjusted Rates for the Ten Leading Causes of Death for All, Male and Female, Davidson County, 1990 - 1995

| Rank* | Cause of death | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|
| | | | All | | | | |
| 1 | Heart Disease | 175.9 | 171.4 | 165.4 | 165.2 | 158.8 | 158.9 |
| 2 | Cancer | 143.7 | 146.7 | 149.9 | 151.0 | 150.4 | 145.9 |
| 3 | Stroke | 36.1 | 27.2 | 28.7 | 35.9 | 32.8 | 35.8 |
| 4 | Accidents | 34.4 | 25.9 | 28.0 | 38.0 | 33.9 | 35.8 |
| 5 | COPD | 22.0 | 23.1 | 21.0 | 35.9 | 25.1 | 26.4 |
| 6 | AIDS/HIV | 9.9 | 9.6 | 11.7 | 26.6 | 18.1 | 22.8 |
| 7 | Homicide | 13.2 | 17.2 | 15.8 | 17.2 | 13.9 | 19.3 |
| 8 | Pneumonia/Influenza | 15.6 | 16.0 | 17.3 | 16.6 | 17.4 | 17.6 |
| 9 | Diabetes | 13.3 | 13.4 | 15.5 | 16.3 | 17.1 | 17.2 |
| 10 | Suicide | 12.2 | 16.2 | 11.5 | 12.6 | 12.8 | 12.9 |
| | | | Male | | | | |
| 1 | Heart Disease | 251.9 | 242.7 | 235.3 | 229.8 | 217.0 | 230.8 |
| 2 | Cancer | 184.5 | 182.7 | 198.1 | 193.1 | 197.1 | 187.9 |
| 3 | Accidents | 52.6 | 40.2 | 39.4 | 46.8 | 51.7 | 54.3 |
| 4 | AIDS/HIV | 19.0 | 18.8 | 31.8 | 41.1 | 34.5 | 42.2 |
| 5 | Stroke | 42.9 | 30.3 | 29.2 | 38.1 | 36.9 | 37.5 |
| 6 | Homicide | 21.4 | 27.9 | 19.1 | 20.3 | 23.2 | 33.0 |
| 7 | COPD | 33.6 | 33.5 | 22.4 | 29.8 | 34.6 | 32.3 |
| 8 | Suicide | 20.2 | 31.4 | 25.6 | 27.8 | 22.3 | 24.0 |
| 9 | Pneumonia/Influenza | 21.7 | 18.6 | 19.5 | 20.2 | 24.4 | 20.4 |
| 10 | Diabetes | 14.7 | 14.6 | 16.4 | 16.1 | 20.5 | 19.5 |
| | | | Female | | | | |
| 1 | Cancer | 124.9 | 124.6 | 118.1 | 121.7 | 119.4 | 111.2 |
| 2 | Heart Disease | 122.8 | 122.5 | 115.2 | 118.2 | 116.9 | 108.1 |
| 3 | Stroke | 31.3 | 25.7 | 26.9 | 32.0 | 29.9 | 34.0 |
| 4 | COPD | 14.4 | 16.2 | 17.4 | 31.1 | 19.3 | 23.0 |
| 5 | Accidents | 18.1 | 13.7 | 15.8 | 19.7 | 18.6 | 19.1 |
| 6 | Pneumonia/Influenza | 12.6 | 14.6 | 15.4 | 16.6 | 13.3 | 16.1 |
| 7 | Diabetes | 12.4 | 12.4 | 15.3 | 13.3 | 14.4 | 15.6 |
| 8 | Mental Disorders | 7.0 | 9.9 | 9.9 | 10.2 | 11.9 | 12.0 |
| 9 | Neurological Disorders | 9.9 | 8.8 | 9.7 | 7.4 | 12.7 | 10.7 |
| 10 | Genitourinary Disease | 8.4 | 9.8 | 6.3 | 9.3 | 6.2 | 6.3 |

*Rank is in descending order based on 1995.

# Table A5: Age-Adjusted Rates for the Ten Leading Causes of Death for White and Black, Davidson County, 1990 - 1995

| Rank* | Cause of death | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|
| | | | | White | | | |
| 1 | Heart Disease | 162.6 | 161.4 | 144.4 | 147.4 | 150.9 | 147.1 |
| 2 | Cancer | 132.1 | 132.3 | 138.4 | 141.2 | 141.8 | 138.5 |
| 3 | Accidents | 31.2 | 25.2 | 28.2 | 35.5 | 33.6 | 35.8 |
| 4 | Stroke | 32.5 | 25.1 | 27.4 | 31.0 | 27.6 | 33.5 |
| 5 | COPD | 21.9 | 24.4 | 20.8 | 26.6 | 26.4 | 26.4 |
| 6 | Pneumonia/Influenza | 13.4 | 15.1 | 14.2 | 12.5 | 15.5 | 16.9 |
| 7 | AIDS/HIV | 10.0 | 9.8 | 12.8 | 13.6 | 13.6 | 16.9 |
| 8 | Suicide | 13.5 | 17.3 | 10.6 | 12.5 | 15.1 | 14.3 |
| 9 | Mental Disorders | 6.9 | 12.2 | 12.2 | 14.8 | 13.3 | 13.0 |
| 10 | Diabetes | 11.0 | 8.4 | 11.0 | 12.3 | 13.2 | 12.5 |
| | | | | Black | | | |
| 1 | Heart Disease | 243.7 | 219.9 | 261.4 | 243.9 | 195.5 | 215.3 |
| 2 | Cancer | 184.9 | 218.3 | 189.7 | 199.4 | 191.2 | 187.8 |
| 3 | Homicide | 36.4 | 41.6 | 34.1 | 58.1 | 36.5 | 48.7 |
| 4 | Stroke | 51.5 | 37.3 | 47.1 | 43.1 | 56.5 | 46.8 |
| 5 | AIDS/HIV | - | - | 37.2 | 37.0 | 35.6 | 44.1 |
| 6 | Diabetes | 24.2 | 36.7 | 18.1 | 49.8 | 36.1 | 38.8 |
| 7 | Accidents | 42.3 | 17.4 | 16.1 | 30.1 | 26.4 | 38.1 |
| 8 | COPD | 22.4 | 20.0 | 32.6 | 32.7 | 19.5 | 26.6 |
| 9 | Pneumonia/Influenza | 24.2 | 20.3 | 21.7 | 27.0 | 26.3 | 23.1 |
| 10 | Genitourinary Disease | 17.6 | 16.4 | 12.9 | 17.8 | 14.6 | 21.2 |

*Rank is in descending order based on 1995.

# Section One: Leading Cause of Death by Age

**Chart 1: Leading Causes of Death, Under Age 1, Davidson County, 1995**

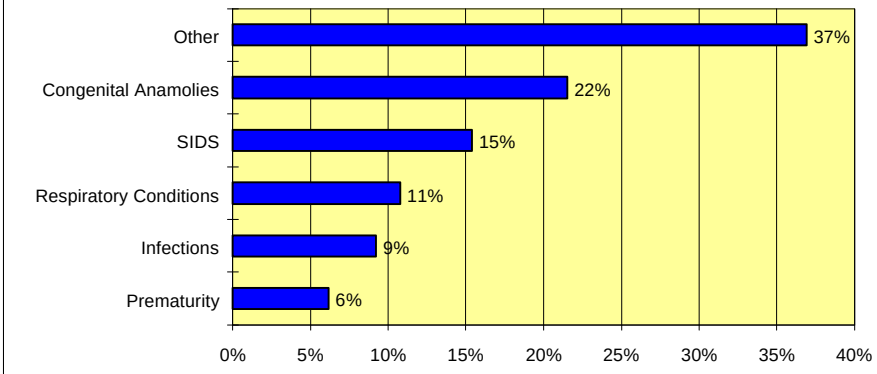



**Chart 2: Leading Causes of Death, Age 1 - 14, Davidson County, 1995**

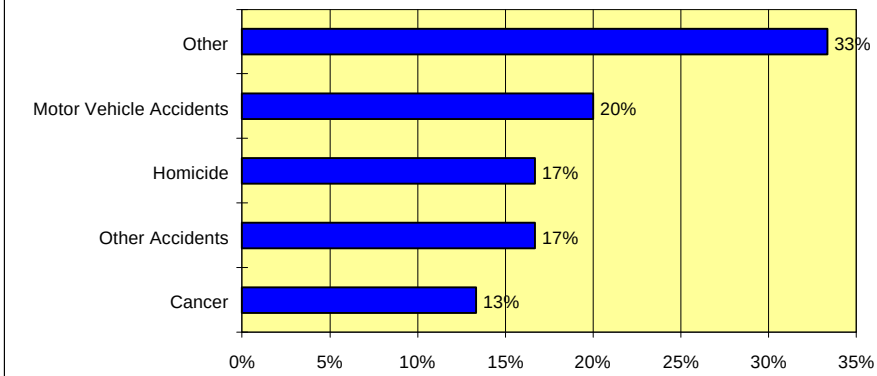
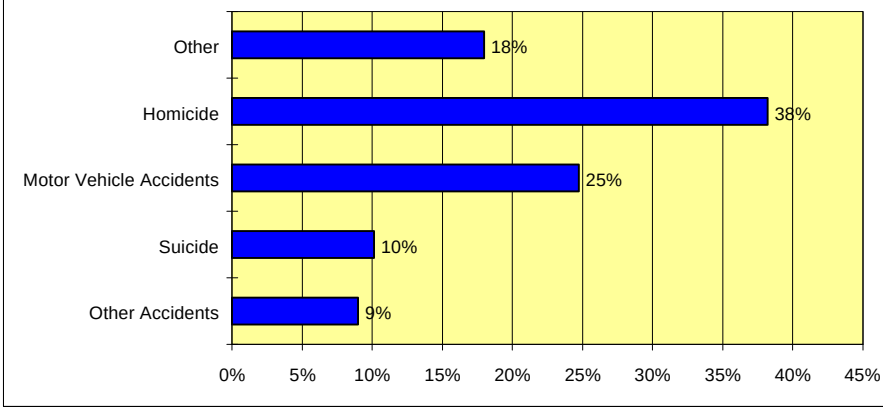



**Chart 3: Leading Causes of Death, Age 15 - 24, Davidson County, 1995**



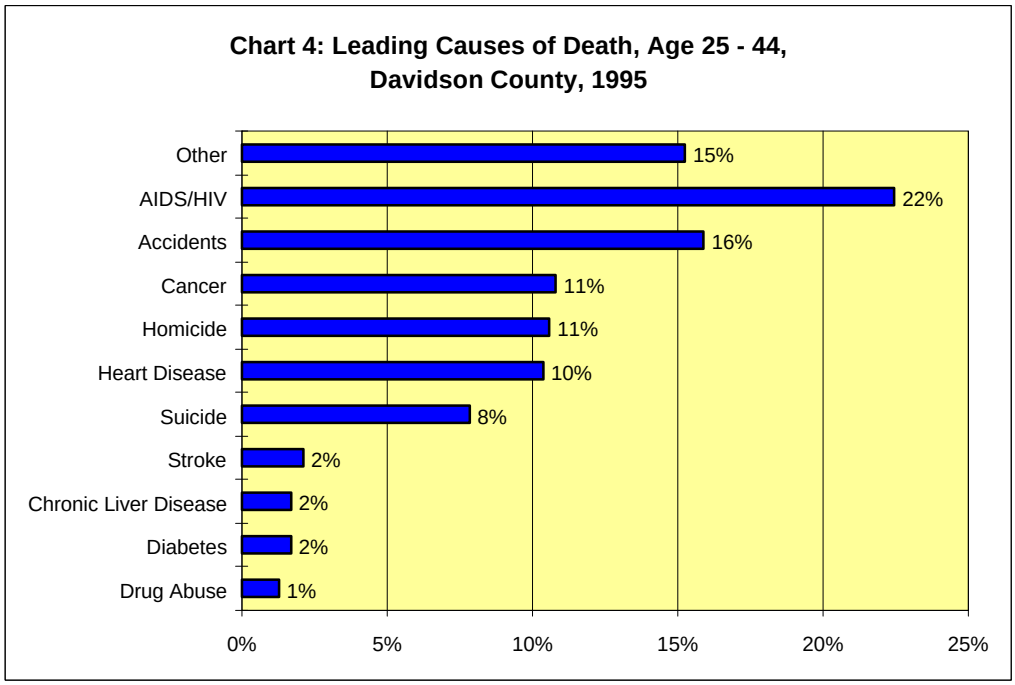


Chart 4: Leading Causes of Death, Age 25 - 44,
Davidson County, 1995
Other
AIDS/HIV
Accidents
Cancer
Homicide
Heart Disease
Suicide
Stroke
Chronic Liver Disease
Diabetes
Drug Abuse
15%
22%
16%
11%
11%
10%
8%
2%
2%
2%
1%
0%
5%
10%
15%
20%
25%

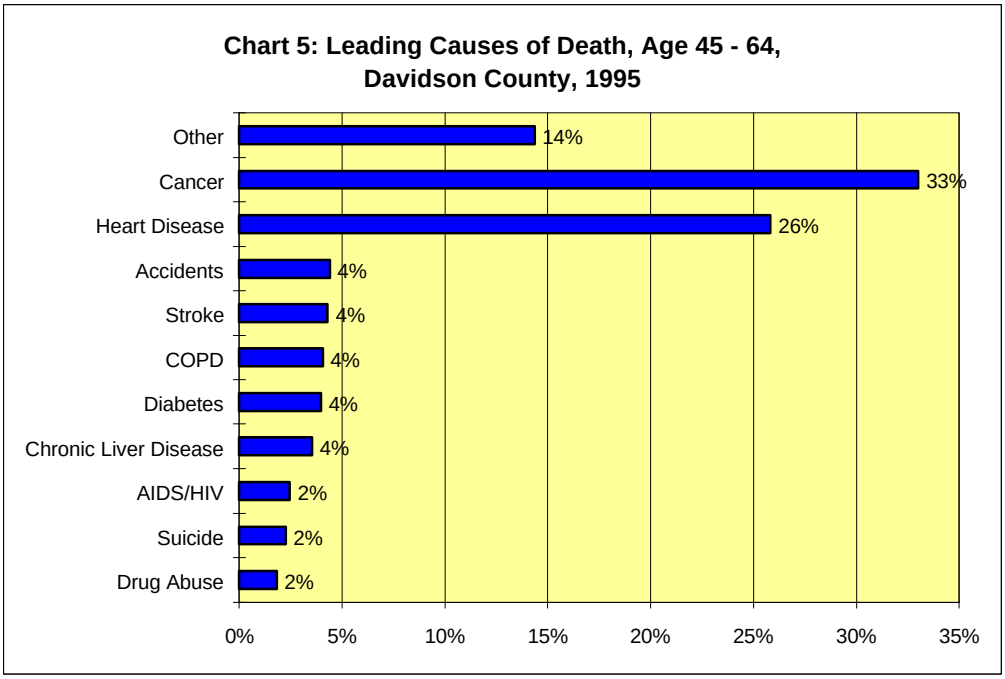


Chart 5: Leading Causes of Death, Age 45 - 64,
Davidson County, 1995
Other
Cancer
Heart Disease
Accidents
Stroke
COPD
Diabetes
Chronic Liver Disease
AIDS/HIV
Suicide
Drug Abuse
14%
33%
26%
4%
4%
4%
4%
4%
2%
2%
2%
0%
5%
10%
15%
20%
25%
30%
35%

**Chart 6: Leading Causes of Death, Age 65 - 74, Davidson County, 1995**

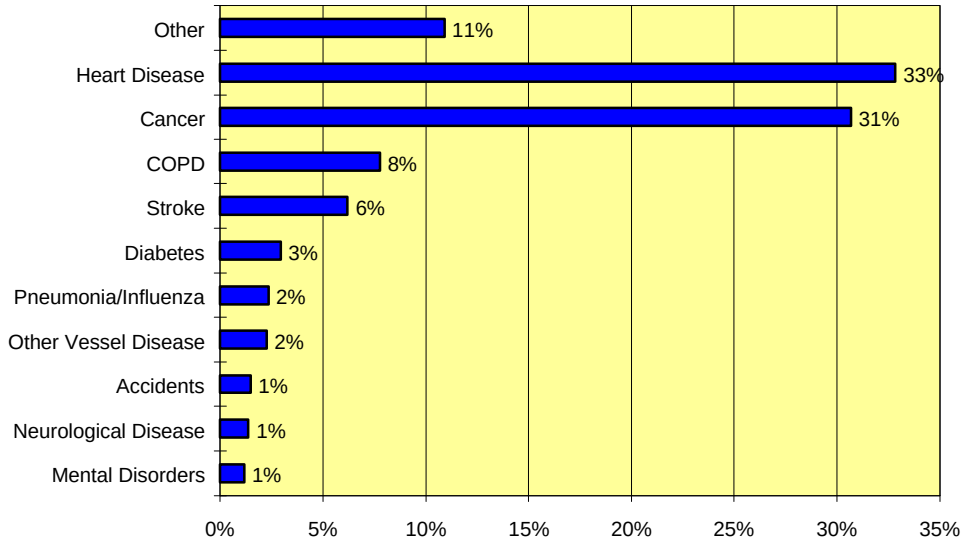
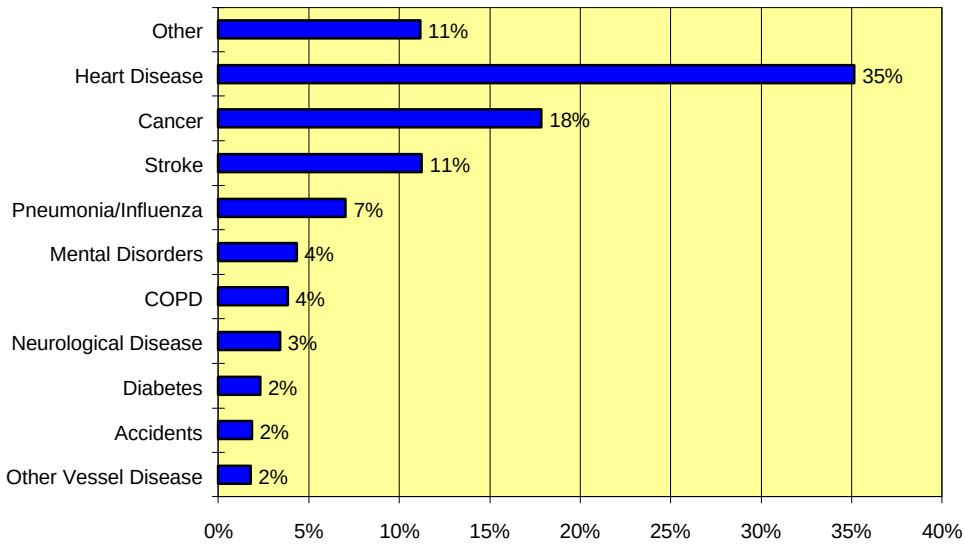
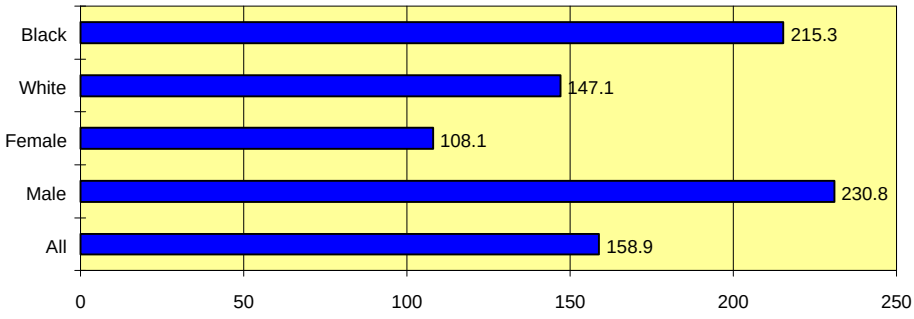



**Chart 7: Leading Causes of Death, Age 75+, Davidson County, 1995**



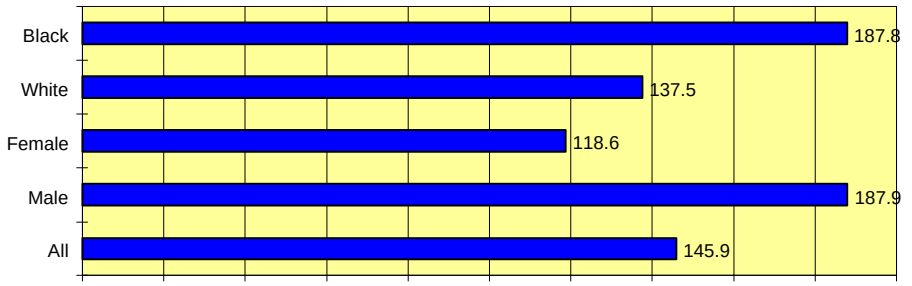
## Section Two - Age-Adjusted Death Rates by Gender and Race

**Chart 8: Age-Adjusted Death Rates* by Gender and Race for Heart Disease in Davidson County, 1995**



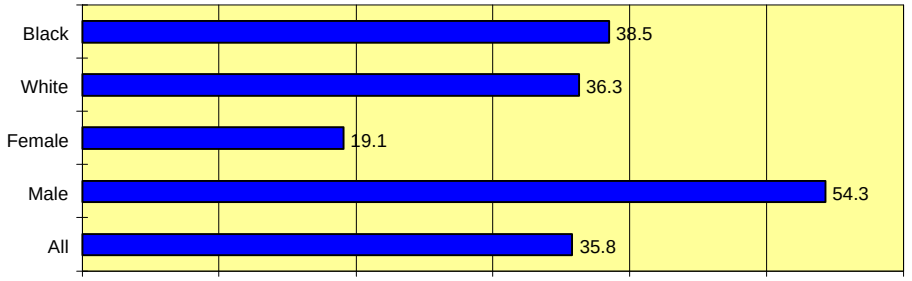

*Deaths per 100,000 population.

**Chart 9: Age-Adjusted Death Rates* by Gender and Race for Cancer in Davidson County, 1995**




*Deaths per 100,000 population.

**Chart 10: Age-Adjusted Death Rates* by Gender and Race for Accidents in Davidson County, 1995**




*Deaths per 100,000 population.

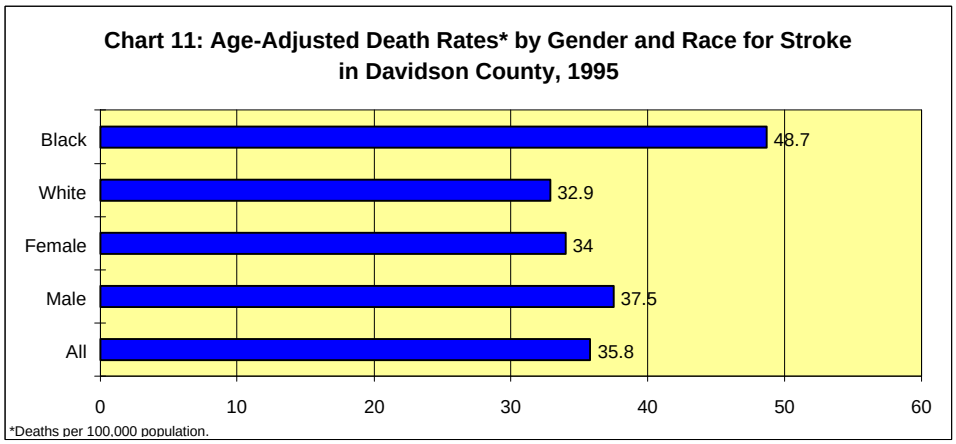


Chart 11: Age-Adjusted Death Rates* by Gender and Race for Stroke in Davidson County, 1995
Black
White
Female
Male
All
48.7
32.9
34
37.5
35.8
0
10
20
30
40
50
60
*Deaths per 100,000 population.

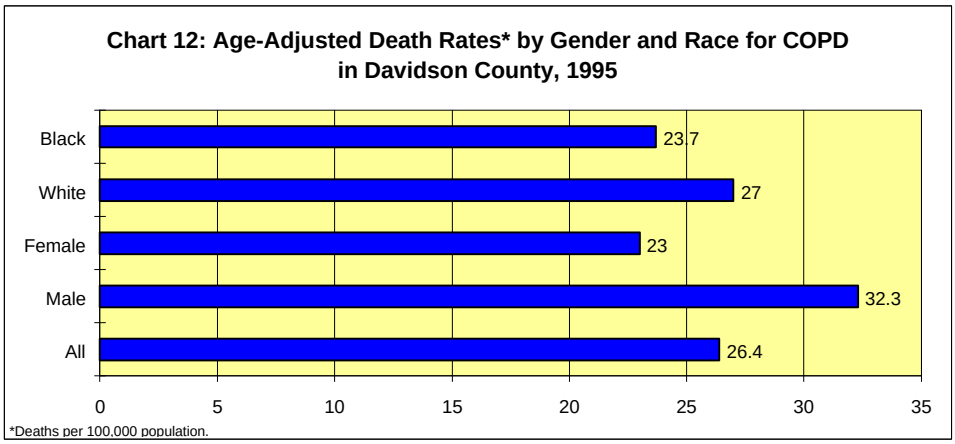


Chart 12: Age-Adjusted Death Rates* by Gender and Race for COPD in Davidson County, 1995
Black
White
Female
Male
All
23.7
27
23
32.3
26.4
0
5
10
15
20
25
30
35
*Deaths per 100,000 population.

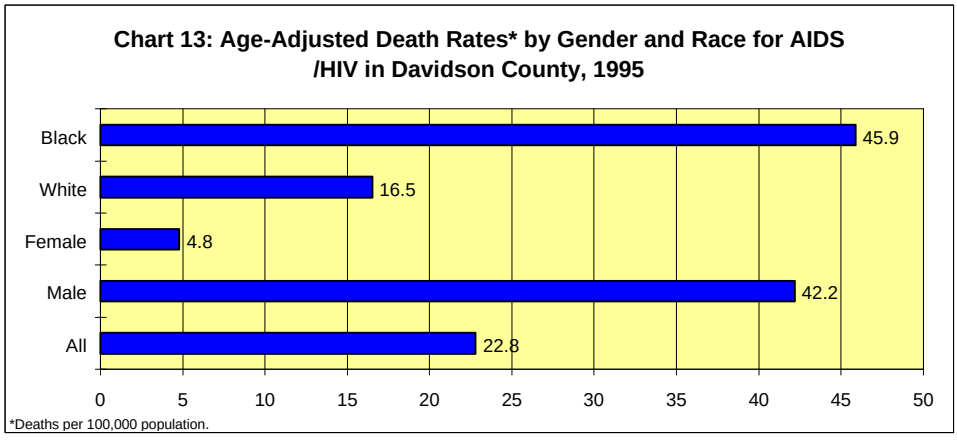


Chart 13: Age-Adjusted Death Rates* by Gender and Race for AIDS /HIV in Davidson County, 1995
Black
White
Female
Male
All
45.9
16.5
4.8
42.2
22.8
0
5
10
15
20
25
30
35
40
45
50
*Deaths per 100,000 population.

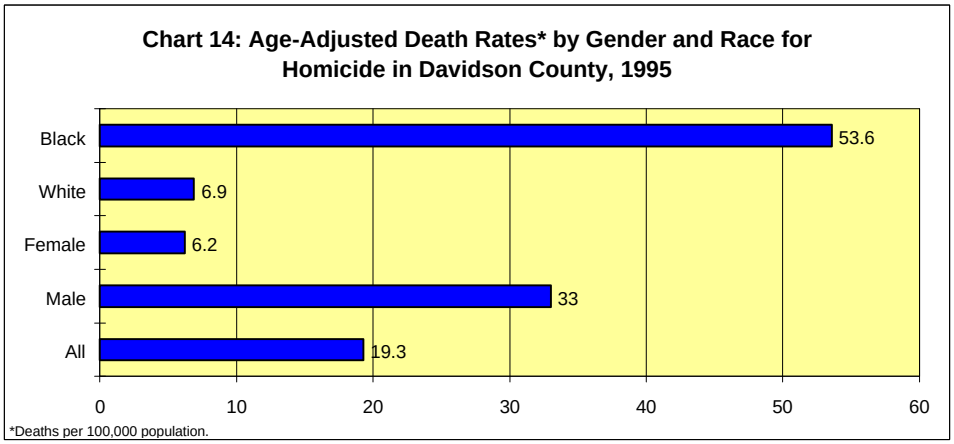


Chart 14: Age-Adjusted Death Rates* by Gender and Race for Homicide in Davidson County, 1995
Black
White
Female
Male
All
53.6
6.9
6.2
33
19.3
0
10
20
30
40
50
60
*Deaths per 100,000 population.

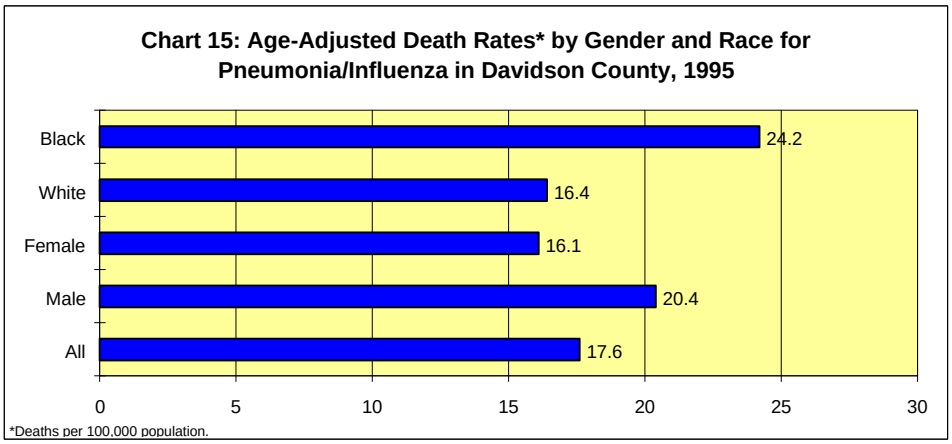


Chart 15: Age-Adjusted Death Rates* by Gender and Race for Pneumonia/Influenza in Davidson County, 1995
Black
White
Female
Male
All
24.2
16.4
16.1
20.4
17.6
0
5
10
15
20
25
30
*Deaths per 100,000 population.

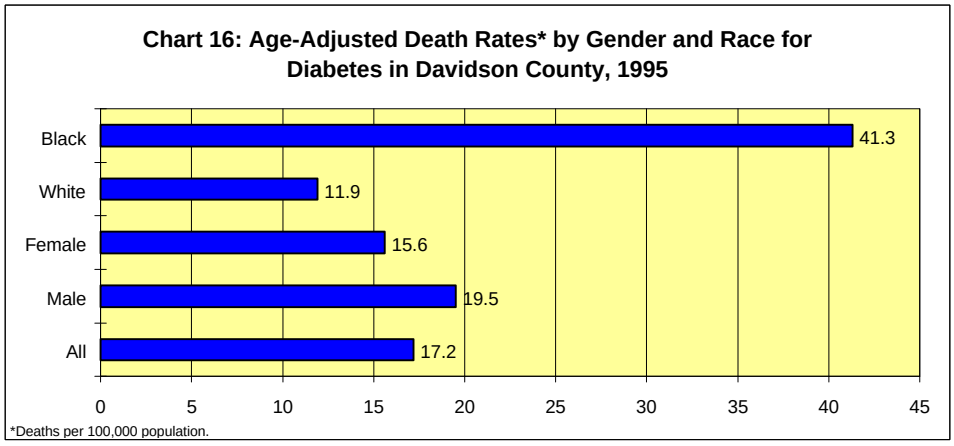


Chart 16: Age-Adjusted Death Rates* by Gender and Race for Diabetes in Davidson County, 1995
Black
White
Female
Male
All
41.3
11.9
15.6
19.5
17.2
0
5
10
15
20
25
30
35
40
45
*Deaths per 100,000 population.

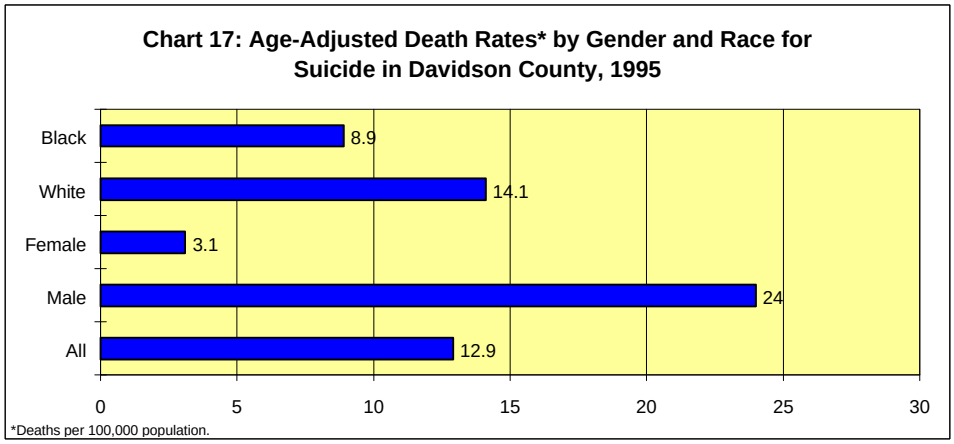


Chart 17: Age-Adjusted Death Rates* by Gender and Race for Suicide in Davidson County, 1995
Black
White
Female
Male
All
8.9
14.1
3.1
24
12.9
0
5
10
15
20
25
30
*Deaths per 100,000 population.